

ABSTRACT

A screen-printing apparatus for printing creamy solder paste on a substrate by attaching a screen mask to the substrate. A laser-measuring device mounted in the apparatus measures the top surface of the screen mask at a printing position and the top of the substrate at a substrate-measurement position by three-dimensional measurement, and detects a shape of the substrate or the screen mask, and determines whether or not they are acceptable. After screen printing is completed, the substrate and the screen mask undergo a printing inspection where their shapes are inspected. This provides not only inspection data of the printing results but also data for identifying the causes of print failures. As a result, the screen-printing apparatus, which has high-printing accuracy and can prevent printing failures from occurring, is provided.